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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,226	12/17/2001	Harry Hedler	MAS-FIN-193	4181

7590 10/16/2003

LERNER AND GREENBERG, P.A.
PATENT ATTORNEYS AND ATTORNEYS AT LAW
Post Office Box 2480
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EXAMINER

BEREZNY, NEMA O

ART UNIT	PAPER NUMBER
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2813

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	10/022,226		HEDLER ET AL.	
	Examiner		Art Unit	
	Nema O Berezny		2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 15-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4,5,5,5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of claims 1-14 in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Applicant's request of a rejoinder under MPEP 821.04 will be applied when appropriate.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-2, 4-5, 7-9, 11-12, and 14 are rejected under 35 U.S.C. 102(a) as being anticipated by Palagonia (5,874,782). Palagonia discloses an electronic component, comprising: an electronic circuit (Fig.3A el.36) having a first surface; electrical contacts (el.40) at least on said first surface for electrical bonding of said electronic circuit; at least one elevation (el.32) disposed on said first surface, said at least one elevation having an elevation surface and an interior and a contact zone, said at least one elevation being formed of an insulating material having sufficient flexibility to absorb stresses occurring in said contact zone as a result of at least one of the group

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consisting of thermal loading and mechanical loading (col.5 lines 305); at least one of said electrical contacts (el.34) disposed on said at least one elevation; and a conduction path (el.44) disposed on said elevation surface between said at least one of said electrical contacts and said electronic circuit. Palagonia also discloses an elastic insulating layer (el.42) at least partially covering said first surface and adjoining said at least one elevation; and conductor runs (el.44) disposed on said insulating layer and forming a conducting connection between said at least one elevation and said electronic circuit; wherein the electronic component is a semiconductor component (col.4 lines 46-48); and wherein at least one of said electrical contacts is formed by one of the group consisting of a conducting layer, a conducting pin, and a conducting ball (col.5 lines 17-28).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palagonia as applied to claims 1-2, 4-5, 7-9 above, and further in view of Chen et al. (5,910,687). Palagonia does not disclose an insulating layer at least partially covering said at least one elevation. However, Chen discloses an insulating layer at least partially covering said at least one elevation (Fig.11 el.321). Therefore, it would have

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been obvious to a person skilled in the art at the time of the invention to use the insulating layer of Chen with the electronic component of Palagonia in order to increase the reliability of the contact layer (col.10 lines 43-54).

Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palagonia as applied to claims 1-2, 4-5, 7-9, and 11-12 above, and further in view of Lee et al. (6,140,456). Palagonia does not disclose a polymer component. However, Lee discloses wherein the electronic component is a polymer component (col.1 lines 25-31; col.4 lines 29-42). Therefore, it would have been obvious to a person skilled in the art at the time of the invention to use the polymer component of Lee with the electronic component of Palagonia in order to form a thin film of material with a low dielectric constant (col.4 lines 35-42; col.5 lines 24-42).

Conclusion

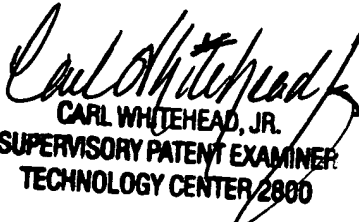
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nema O Berezny whose telephone number is (703) 305-3445. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr. can be reached on (703) 308-4940. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

NB


CARL WHITEHEAD, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800